



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,378	09/15/2004	Chin-Chung Tu	13816-US-PA	5377
31561	7590	01/25/2006	EXAMINER	
JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE 7 FLOOR-1, NO. 100 ROOSEVELT ROAD, SECTION 2 TAIPEI, 100 TAIWAN			RAO, SHRINIVAS H	
			ART UNIT	PAPER NUMBER
			2814	

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

Office Action Summary

Application No.

10/711,378

Applicant(s)

TU ET AL.

Examiner

Steven H. Rao

Art Unit

2814

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 10-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

The application as currently filed does not claim priority from any previously filed patent application. Therefore the earliest available filling date is the U.S. filling date namely September 14, 2005.

Election/Restrictions

Applicant's election without traverse of claims 1-9 in the reply filed on December 09, 2005 is acknowledged.

Claims 10-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim.

Election was made **without** traverse in the reply filed on December 09, 2005.

Information Disclosure Statement

To date no IDS has been filed in this application.

Claim Objections

Claims 3 and 6 are objected to because of the following informalities:

Claim 3 wherein the head component comprises: a first gasket having a contact point with the gimbal; and a ring piece fixed on the first gasket, wherein the inner edge of the ring piece and the first gasket consist a groove

It is not understood what Applicants mean by the recitation wherein the inner edge of the ring piece and the first gasket consist a groove.

It is not clear whether Applicants' mean the inner edge of the ring piece has a groove and the ring piece which is part of the first gasket therefore the first gasket has

Art Unit: 2814

the ring piece with the rove along the inner edge or some thing else (description para 022 does not also clarify the above recitation).

Appropriate correction is required.

Claim 6 :

“the mechanism for compressing chips of claim 5, wherein the head component further comprises a second gasket fixed under the heating plate which is placed between the first gasket and the second gasket”.

If Applicants' mean a second gasket is placed between the first gasket and itself , how is this possible?

If Applicants' mean that the head component comprises two gaskets between which a heating plate is placed then the same must be clearly recited.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Trojan et al. (U.S. Patent No. 5,899,798 , herein after Trojan) .

With respect to claim 1 Trojan describes a mechanism for compressing chips, comprising : a loading component; (Trojan figure 7-Load cell) a head component disposed under the loading component with a gap in-between; (Trojan figures 4 A, 6 etc. # 401) a gimbal disposed between the loading component and the head component

Art Unit: 2814

to support the gap there between. (Trojan figure 4A ,7 when gimbal integral with contact pin(i.e. head component col.6 lines 35-37).

With respect to claim 2 Trojan describes the mechanism for compressing chips of claim 1, wherein the head component has a groove and the bottom of the loading component is partially inset into the groove. (Trojan figure 7).

With respect to claim 3 to the extent understood , Trojan describes the mechanism for compressing chips of claim 2, wherein the head component comprises: a first gasket having a contact point with the gimbal ; and a ring piece fixed on the first gasket, (Trojan 600) wherein the inner edge of the ring piece and the first gasket consist a groove (Trojan figure 5 # 550 similar to applicants' figure 2 # 232, see also Trojan col.8 lines 56 to 65, col. 10 lines 16-24,)

With respect to claim 4 Trojan describes the mechanism for compressing chips of claim 3, wherein the upper surface of the first gasket has a first notch, where the Gimbal is disposed. (Trojan figure 7, col. 10 lines 16-24).

With respect to claim 9 Trojan describes the mechanism for compressing chips of claim 1, wherein the bottom surface of the loading component has a second notch where the gimbal is disposed. (Trojan figures).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made

Art Unit: 2814

to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trojan et al. (U.S. Patent No. 5,899,798 , herein after Trojan) as applied to claims 1-4, ~~¶~~ 4 etc. above and further in view of Luse et al. (U.S. Patent No. 6,486,660, herein after Luse).

With respect to claim 5 Trojan describes the mechanism for compressing chips of claim 3, with the head component .

Trojan does not specifically describe the head component further comprises a heating plate fixed under the bottom surface of the first gasket .

However Luse , a patent from the same filed of endeavor describes in figure 5 and col. 6 lines 7 to 20 a pair of heating plates fixed under the bottom surface of the first gasket to provide a thermoelectric source to melt the adhesive or heat the components when quicker bonding is desired.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include Luse's heating plates in Trojan's device to provide a thermoelectric source to melt the adhesive or heat the components when quicker bonding is desired.

With respect to claim 6 to the extent understood, Trojan describes the mechanism for compressing chips of claim 5, wherein the head component further comprises a second gasket fixed under the heating plate which is placed between the first gasket and the second gasket. (Luse figure 5 # 502).

Art Unit: 2814


With respect to claim 7 Trojan describes the mechanism for compressing chips of claim 6, wherein the head component further comprises at least one fixing piece joining the ring piece, the first gasket, the heating plate and the second gasket. (Luse figure 5 plate spring clamping mechanism, col. 5 lines 55- col. 6 line 6)

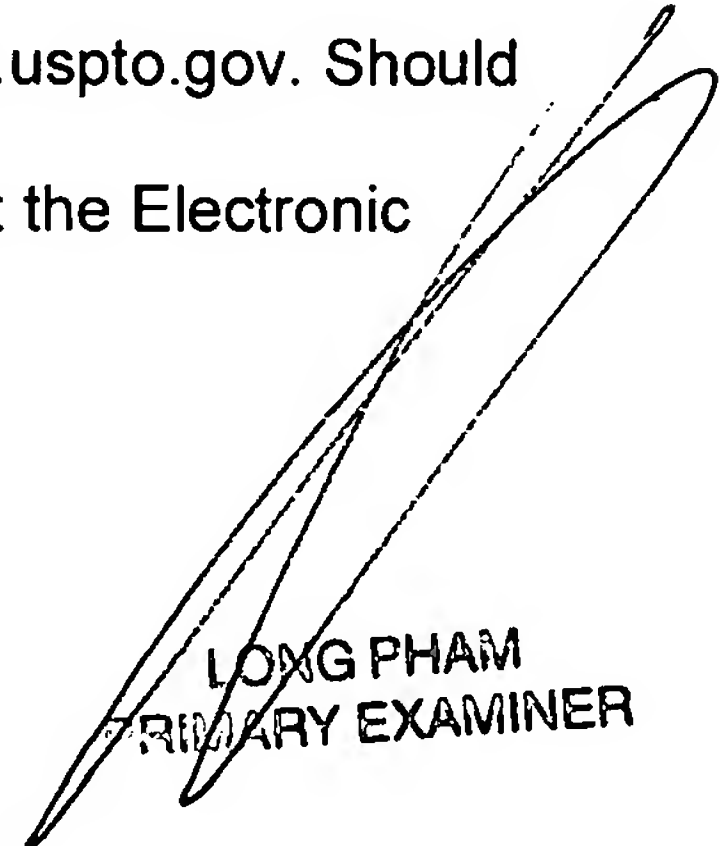
With respect to claim 8 Trojan describes the mechanism for compressing chips of claim 7, wherein the fixing piece comprises a screw. (Luse col. 5 lines 55- col. 6 line 6, Trojan col. 8 line 64).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven H. Rao whose telephone number is (571)272-1718. The examiner can normally be reached on 8.00 to 5.00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fahmy Wael can be reached on (571) 272-1714. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Steven H. Rao
1/20/05


LONG PHAM
PRIMARY EXAMINER